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Request for Continued Examination (RCE) Transmittal

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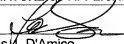
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| Application Number | 10/545,194-Conf. #9959 |
| Filing Date | August 11, 2005 |
| First Named Inventor | Man-Yop Han |
| Art Unit | 3634 |
| Examiner Name | C. L. Bradford |
| Attorney Docket Number | H0595.0026/P026 |

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ii. ☐ Other _____
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- iii. ☐ Information Disclosure Statement (IDS)
- ii. ☐ Affidavit(s)/Declaration(s)
- iv. ☐ Other _____
2. **Miscellaneous**
- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(f) required)
- b. ☐ Other _____
3. **Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
- a. ☒ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any Overpayments, to Deposit Account No. 04-1073.
- i. ☒ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other _____
- b. ☐ Check in the amount of \$ _____ enclosed
- c. ☒ Payment by credit card (Form PTO-2038 enclosed)
- WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

| | | | |
|-------------------|---|------------------|----------------|
| Signature |  | Date | April 25, 2011 |
| Name (Print/Type) | Thomas V. D'Amico | Registration No. | 28,371 |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Man-Yop Han

Application No.: 10/545,194

Confirmation No.: 9959

Filed: August 11, 2005

Art Unit: 3634

For: PRESTRESSED SCAFFOLDING SYSTEM

Examiner: C. L. Bradford

AMENDMENT ACCOMPANYING REQUEST FOR CONTINUED EXAMINATION

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated January 25, 2011, finally rejecting claims 1 and 3-8, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A prestressed scaffolding system for supporting an excavated earth retaining wall by forming a polygonal closed section, comprising:

a tendon;

a prestressed wale comprising a plurality of triangular tendon supports, being in contact with the tendon, and located in the middle portion of said wale, a tendon-anchoring unit at both ends of said wale, and a connecting brace for connecting the tendon to said triangular tendon supports and to said tendon-anchoring unit; and

a strut constituted by a truss or a plurality of H-beams or an H-beam having a large cross section and supporting said tendon-anchoring unit,

wherein the triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle and the vertical member and the inclined members are all connected to the wale.

wherein the tendon-anchoring unit forms an isosceles triangle, and a first corner of said isosceles triangle is reinforced by a reinforcing member.

wherein said tendon is fixed at a second corner of said isosceles triangle and tensioned by a hydraulic jack, and a member facing said second corner of said isosceles triangle is connected to the strut through a hydraulic jack or a screw jack, and a portion of said isosceles triangle which is connected with said wale has a length adjusting function.

2. (Canceled)

3. (Previously presented) The system as defined in claim 1, wherein said triangular tendon support is supported and connected by an intermediate pile and a support beam for preventing a vertical buckling of the tendon support.

4. (Currently Amended) ~~The system as defined in claim 1,~~ A prestressed scaffolding system for supporting an excavated earth retaining wall by forming a polygonal closed section, comprising:

a tendon; and

a prestressed wale comprising a plurality of triangular tendon supports, being in contact with the tendon, and located in the middle portion of said wale, a tendon-anchoring unit at both ends of said wale, and a connecting brace for connecting the tendon to said triangular tendon supports and to said tendon-anchoring unit;

wherein said tendon-anchoring unit fixes a tendon and couples with said wale for applying a compression force supported by an inclined brace or a vertical brace ~~said inclined members or vertical member, said inclined members or vertical member being~~ which is inserted into the tendon-anchoring unit,

wherein the triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle and the vertical member and the inclined members are all connected to the wale,

wherein the tendon, entered from one side of said tendon-anchoring unit, is fastened at an opposite side of said tendon-anchoring unit, a single wale or a double wale is supported by said tendon-anchoring unit, and said tendon-anchoring unit is equipped with a screw jack or a precedent load jack having a length adjusting function.

5. (Canceled)

6. (Currently Amended) ~~The system as defined in claim 4,~~ A prestressed scaffolding system for supporting an excavated earth retaining wall by forming a polygonal closed section, comprising:

a tendon;

a prestressed wale comprising a plurality of triangular tendon supports, being in contact with the tendon, and located in the middle portion of said wale, a tendon-anchoring unit at both ends of said wale, and a connecting brace for connecting the tendon to said triangular tendon supports and to said tendon-anchoring unit; and

a strut constituted by a truss or a plurality of H-beams or an H-beam having a cross section and supporting said tendon-anchoring unit,

wherein the triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle and the vertical member and the inclined members are all connected to the wale,

wherein said tendon-anchoring unit forms a trapezoid, and the corner of said trapezoid is reinforced by a reinforcing member, said tendon and a second tendon from a second wale are ~~[[is]]~~ fixed at both lower corners, and tensioned by a hydraulic jack,

wherein ~~and~~ a middle portion is directly connected to said truss strut or through a hydraulic jack or a screw jack.

7. (Canceled)

8. (Currently Amended) A prestressed scaffolding system forming a polygonal closed section only by using a prestressed wale comprising:

a tendon~~[[,]]~~;

a plurality of triangular tendon supports, being in contact with the tendon, and located in the middle portion of said wale;

~~[[a]]~~ corner tendon-anchoring units at both ends of said wale;

a length adjusting unit transmitting force from the tendon to an adjacent wale; and

a connecting brace for connecting the tendon to said triangular tendon supports and to said tendon-anchoring unit,

wherein the triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle, and the vertical member and the inclined members are all connected to the wale,

wherein the tendon-anchoring unit is placed at a corner anchoring unit of the polygonal closed section with no supporting struts and is designed to be connected with said wale and to fix the tendon and a second tendon from a second wale at both sides of the tendon-anchoring unit by hydraulic jacks which tension the tendon and the second tendon.

Claims 9-11. (Canceled)

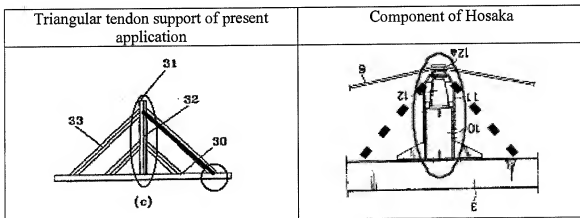
REMARKS

Claims 1, 4, 6, and 8 have been amended. Claims 5 and 7 have been canceled. Claims 1, 3, 4, 6, and 8 are currently pending.

Claims 1, 3, 4, and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hosaka in view of U.S. Patent No. 3,710,578 to Inoue. The rejection is respectfully traversed.

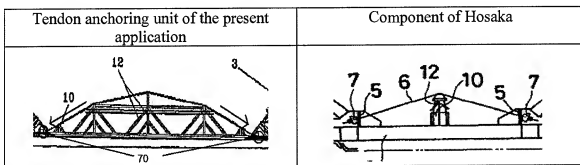
Claims 1, 4, and 6 each recite that a “triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle and the vertical member and the inclined members are all connected to the wale.” The inclined members connected to the wale distribute external forces to the wale and protect the triangular tendon support from tilting.

In contrast, Hosaka discloses a base metal 10 that has only a vertical member and that does not have the inclined members which are connected to the wale as shown below in the figure. With Hosaka’s design, tilting of the base metal 10 by external forces is expected. Furthermore, the portion of the base metal 10, indicated by the Examiner as being the claimed inclined member, is nothing more than the inclined portions of the base metal 10 and does not connect to the wale. Thus, Hosaka fails to teach or suggest at least these limitations of claims 1, 4, and 6.



Claim 1 recites “wherein the tendon-anchoring unit forms an isosceles triangle ... wherein said tendon is fixed at a second corner of said isosceles triangle and tensioned by a hydraulic jack.” Claim 6 recites that “said tendon-anchoring unit forms a trapezoid, and said tendon and a second tendon from a second wale are fixed at both lower corners, and tensioned by a hydraulic jack.” Therefore, the tendon-anchoring units of claims 1 and 6 have the functions of tensioning and fixing the tendon.

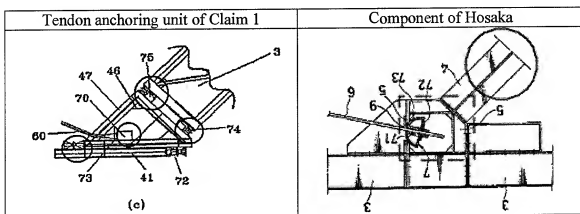
In contrast, as shown below in the figure, Hosaka discloses fixing the ends of a steel wire 6 to receivers 7 and tensioning the steel wire 6 by pushing the middle of the tendon up by jack 12. Thus, Hosaka fails to teach or suggest at least these limitations of claims 1 and 6.



Claim 1 further recites “wherein the tendon-anchoring unit forms an isosceles triangle, and a first corner of said isosceles triangle is reinforced by a reinforcing member, wherein said tendon is fixed at a second corner of said isosceles triangle and tensioned by a hydraulic jack, and a member facing said second corner of said isosceles triangle is connected to the strut through a hydraulic jack or a screw jack, and a portion of said isosceles triangle which is connected with said wale has a length adjusting function.”

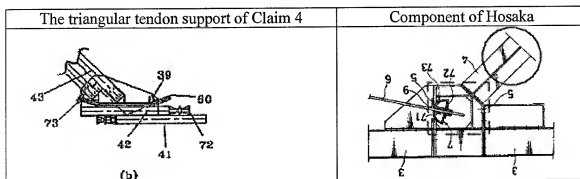
In contrast, as shown below in the figure, Hosaka discloses an anchoring unit of a tetragonal shape where the steel wire 6 is fixed at the side of the tetragon and the unit is directly connected to a beam 4. With the anchoring unit connected directly to the beam 4, the component of Hosaka cannot impose large compressive forces to the tendon-anchoring unit from the strut. In contrast, claim 1 recites that “a member facing said second corner of said isosceles triangle is

connected to the strut through a hydraulic jack or a screw jack, and a portion of said isosceles triangle which is connected with said wale has a length adjusting function.” Additionally, the receiver 7 of Hosaka is directly connected to the wale and is not connected to a length adjusting function as recited in claim 1 to solve problems, such as construction error. Thus, Hosaka fails to teach or suggest at least these limitations of claim 1.



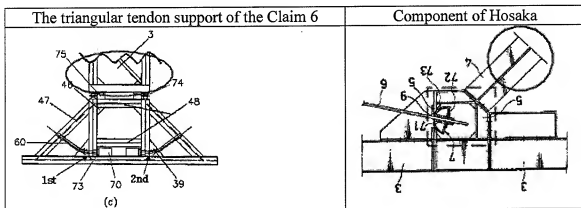
Claim 4 recites “wherein the tendon entered from one side of said tendon-anchoring unit is fastened at an opposite side of said tendon-anchoring unit, a single wale or a double wale is supported by said tendon-anchoring unit, and said tendon-anchoring unit is equipped with a screw jack or a precedent load jack having a length adjusting function.”

In contrast, as shown below in the figure, Hosaka discloses directly connecting the receiver 7 to the wale. Thus, Hosaka fails to teach or suggest at least these limitations of claim 4.



Claim 6 recites “wherein said tendon-anchoring unit forms a trapezoid, and said tendon and a second tendon from a second wale are fixed at both lower corners, and tensioned by a hydraulic jack, wherein a middle portion is directly connected to said truss strut or through a hydraulic jack or a screw jack.”

In contrast, as shown below in the figure, Hosaka discloses an anchoring unit of a tetragonal shape where a single steel wire 6 is fixed at the side of the tetragon. Further, beam 4 of Hosaka is directly connected to the anchoring unit and is not connected through a hydraulic jack or a screw jack as recited in claim 6. As a result, Hosaka cannot impose large compressive forces to the tendon-anchoring unit from the strut. Thus, Hosaka fails to teach or suggest at least these limitations of claim 6.



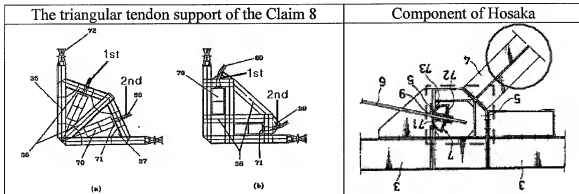
The Office Action relies on Inoue to remedy the deficiencies of Hosaka. Inoue, cited by the Office Action as disclosing the utility of struts for shoring an apparatus, fails to remedy the deficiencies of Hosaka. Thus, the cited combination of Hosaka and Inoue fails to teach or suggest all the limitations of claims 1, 4, and 6 and claims 1, 4, and 6 are patentable. Claim 3 depends from claim 1 and is patentable for at least the same reasons.

Additionally, the Applicant notes that letters patent for corresponding applications in Korea, Japan, and China have been obtained, which provides some evidence of patentability. Accordingly, Applicant requests that the rejection be withdrawn and the claims be allowed.

Claim 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent Publication No. 63-019334 to Hosaka et al. ("Hosaka"). The rejection is respectfully traversed.

Claim 8 recites, in part, a "prestressed scaffolding system forming a polygonal closed section only by using a prestressed wale comprising: a tendon; a plurality of triangular tendon supports, ... wherein the triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle, and the vertical member and the inclined members are all connected to the wale, wherein the tendon-anchoring unit is placed at a corner of the polygonal closed section with no supporting struts and is designed to be connected with said wale and to fix the tendon and a second tendon from a second wale at both sides of the tendon-anchoring unit by hydraulic jacks which tension the tendon and the second tendon."

As discussed above, Hosaka fails to disclose that a "triangular tendon support is constituted by a vertical member and inclined members, or only by the inclined members for forming a triangle, and the vertical member and the inclined members are all connected to the wale." Furthermore, as shown below in the figure, the anchoring unit of Hosaka is a tetragonal shape and has just one tendon fixed to one side of the tetragon. In contrast, claim 8 recites that the tendon anchoring unit is designed "is designed to be connected with said wale and to fix the tendon and a second tendon from a second wale at both sides of the tendon-anchoring unit by hydraulic jacks which tension the tendon and the second tendon." Additionally, the anchoring unit of Hosaka requires the use of the beam 4 to supplement compression force. In contrast, claim 8 recites that the "tendon-anchoring unit is placed at a corner of the polygonal closed section with no supporting struts." Thus, Hosaka fails to disclose all the limitations of claim 8 and claim 8 is allowable. Accordingly, Applicant requests that the rejection be withdrawn.



In view of the above, Applicant believes the pending application is in condition for allowance.

Dated: April 25, 2011

~~Respectfully submitted,~~

By

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